

WHAT IS CLAIMED IS:

1. An optical apparatus comprising:
 - a light-exclusion member for shielding a passing luminous flux passing along an optical path;
 - first driving means for back and forth moving the light-exclusion member relative to the optical path;
 - a light-attenuating member for reducing an amount of a passing luminous flux passing along the optical path; and
 - second driving means for back and forth moving the light-attenuating member relative to the optical path,wherein the second driving means is arranged so as to pile up on the first driving means.
2. The optical apparatus according to Claim 1, wherein the second driving means is arranged so as to pile up relative to the first driving means in an optical-axial direction of the optical path, and the light-exclusion member and the light-attenuating member are arranged closer to the first driving means in comparison to the second driving means.
3. The optical apparatus according to Claim 1, wherein the second driving means is arranged so that the central axis, around which the light-attenuating member of the

second driving means is rotationally driven, is coaxial with the central axis, around which the light-exclusion member of the first driving means is rotationally driven.

4. The optical apparatus according to Claim 1, further comprising at least one rotational shaft for rotatably supporting the light-exclusion member and the light-attenuating member commonly.

5. An optical apparatus arranged within a lens device having a movable lens for shielding and attenuating passing light, the optical apparatus comprising:

- a light-exclusion member for shielding passing light;
- first driving means for back and forth moving the light-exclusion member relative to an optical path;
- a light-attenuating member for attenuating the passing light;

- second driving means integrally piled up on the first driving means for back and forth moving the light-attenuating member relative to the optical path; and

- a case member having an opening for passing light in that the light-exclusion member and the light-attenuating member being supported so as to back and forth move relative to the opening, and the first driving means and the second driving means integrated with each other being arranged

sideward the opening so that the piling up direction thereof is in parallel with the optical axis of the optical path,

wherein one of shafts for supporting the lens movably in the optical axial direction is arranged sideward the opening and within the lens device so as to pass through the vicinity of the first driving means and the second driving means integrated with each other.

6. A camera comprising the optical apparatus according to Claim 1.

7. An optical apparatus comprising:

a plurality of light-exclusion members for shielding an opening for passing a photographing luminous flux therethrough in concert therewith; and

driving means disposed adjacent to escape positions of the light-exclusion members for rotating the plurality of light-exclusion members between the escape positions escaping from the opening and shielding positions shielding the opening,

wherein the plurality of light-exclusion members, each having an engaging hole to be commonly brought into engagement with one of drive retainers of the driving means coaxially about a rotation center, are overlapped therewith at the escape positions and are rotated from the escape

positions to the shielding positions by an angle different from each other in the same direction so as to divisively shield the opening.

8. The optical apparatus according to Claim 7, wherein the front edge of the light-exclusion member, which has a minimum rotational angle from the escape position to the shielding position for solely shielding an opening portion located close to the escape position among the plurality of light-exclusion members, has a shape running parallel to the opening portion located close to the escape position in a state that the light-exclusion member is located at the escape position while the front edge of the light-exclusion member, which has a maximum rotational angle from the escape position to the shielding position for solely shielding an opening portion located distant from the escape position among the plurality of light-exclusion members, has a shape running parallel to the opening portion located distant from the escape position in a state that the light-exclusion member is located at the escape position.

9. A camera comprising the optical apparatus according to Claim 7.

10. An optical apparatus comprising:

an opening member having an opening for passing a luminous flux therethrough;

a drive pin driven by a driving source;

a leading shutter blade having a cam hole that is brought into engagement with the drive pin that drives the leading shutter blade for opening and shutting the opening; and

a trailing shutter blade having a hole with a clearance that is brought into engagement with the drive pin after the leading shutter blade is moved, the drive pin driving the trailing shutter blade for opening and shutting the opening.

11. An optical apparatus comprising:

an opening member having an opening for passing a luminous flux therethrough;

a drive member driven by a driving source;

two shutter blades for opening and shutting the opening;

shutter-blade driving means driven by a driving force from the drive member for driving one of the two shutter blades; and

shutter-blade delay driving means driven by a driving force from the drive member for driving the other of the two shutter blades after the one shutter blade is moved.

12. The optical apparatus according to Claim 11, wherein the shutter-blade driving means is cam means disposed between the drive member and the one shutter blade.

13. The optical apparatus according to Claim 11, wherein the shutter-blade delay driving means comprises a drive pin provided in the drive member and a hole provided in the other shutter blade that is engaged with the drive pin, the hole having a clearance formed along a moving direction of the drive pin.

14. A shutter device comprising:
a shutter blade; and
a shock absorbing material arranged out of a movement trajectory of the shutter blade.

15. A device according to Claim 14, wherein the shutter device is a lens shutter device.

16. A shutter device comprising:
a shutter blade; and
a shock absorbing material arranged out of a movement trajectory of the shutter blade in a displacing direction of the shutter blade displacing by deflection during movement of the shutter blade or immediately after the movement

thereof in a direction substantially perpendicular to a moving direction of the shutter blade.

17. A device according to Claim 16, wherein the shutter device is a lens shutter device.

18. A shutter device comprising:

a shutter blade; and

a shock absorbing material arranged in a vicinity of a movement trajectory of the shutter blade and in a displacing direction of the shutter blade displacing by deflection of the shutter blade due to the movement of the shutter blade.

19. A device according to Claim 18, wherein the shutter device is a lens shutter device.

20. A shutter device comprising:

a shutter blade;

a guide unit for guiding deformation of the shutter blade when the shutter blade is temporarily stopped or finishes the movement of the shutter blade; and

an absorbing member for absorbing kinematic energy of the shutter blade by abutting the shutter blade by the deformation of the shutter blade produced by the guidance.

21. A device according to Claim 20, wherein the shutter device is a lens shutter device.